

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Hawker, et al.

Art Unit: 2614

Application No.: 10/695,137

Examiner: Disler Paul

Filed: October 28, 2003

Attorney Docket No.: 555255-012611

For: System and Method of Acoustically Safe  
Automatic Handsfree Volume Adjustment

**APPEAL BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed October 27, 2010, which finally rejected claims 25, 26, 29-34, 37-43, 45, and 46 of the instant application. An After-Final Response was filed on December 17, 2010, and an Advisory Action was mailed on January 21, 2011. A Notice of Appeal and Request for Pre-Appeal Brief Conference was received by the U.S. Patent Office on February 28, 2011. A Notice of Panel Decision from Pre-Appeal Brief Review was mailed on March 29, 2011. The Commissioner is hereby authorized to charge any necessary fees and credit any overpayment associated with this Appeal to Jones Day Deposit Account No. 501432, ref: 555255-012611.

**I. Real Parties In Interest**

The real party in interest is Research in Motion Limited as evidenced by an assignment recorded at Reel/Frame 016462/0822.

**II. Related Appeals And Interferences**

There are no related appeals or interferences to the instant application.

**III. Status Of Claims**

Claims 25, 26, 29-34, 37-43, 45, and 46 are pending and are finally rejected. Claims 1-24, 27-28, 35-36, and 44 were previously cancelled. The specific rejections of independent claims 25, 33, and 41 are hereby appealed. The rejections of the remaining claims stand or fall with the rejection of independent claims 25, 33, and 41.

**IV. Status of Amendments**

No amendments were made in the After-Final Response of December 17, 2010. Amendments made in the Response of October 6, 2010, were entered by the Examiner prior to issuance of the Final Office Action of October 27, 2010.

**V. Summary of Claimed Subject Matter**

The claimed subject matter of independent claims 25, 33, and 41 relates to systems and methods for protecting a user's hearing when switching a mobile device from a handset mode to a handsfree mode.

Paragraph [0006] of the pre-grant publication of the instant application describes a handsfree mode of operation in which the mobile device uses a loudspeaker or similar transducer

device to conduct voice communications. During handsfree mode, the device is to be held in the hand or placed on a surface at a distance away from the ear, and a speaker on the device enunciates the incoming call.

Paragraph [0017] identifies a particular safety issue that may arise in activating the handsfree mode. During handsfree conversations, the device is usually an arms-length away from the user's ears. To compensate for the increased distance, these devices incorporate a higher volume profile. In certain situations, the user may bring the device in handsfree mode close to their ear such that the sound level may be high enough at the ear to cause hearing damage. For example, the user may switch from a handset mode to a handsfree mode while the mobile device is pressed against the user's ear. Accordingly, the resulting sound level at the user's ear may not pass acoustic safety requirements such that the device manufacturer may not be able to sell the device to operate in handsfree mode.

The instant application discloses as an embodiment a system and method that includes a mobile device being configurable to operate the mobile device according to a safe volume profile when switching the mobile device from the handset mode of operation to the handsfree mode of operation. An example operational scenario is shown in FIG. 5 and described at paragraphs [0032]-[0036]. Paragraphs [0034]-[0036] state:

[0034] If the user decides to answer the call in step 402, the user then selects an operational mode in step 404 to answer the call. The mode may be selected from one of a plurality of operational modes, including handsfree mode 408, handset mode 410 or headset mode 412. If the user chooses to answer the call using either a handset mode 410 or headset mode 412, then a handset volume profile is triggered at step 416 in which the device utilizes the default handset volume level to conduct the phone conversation at step 418. However, if the user selects handsfree mode 408, then the device triggers a safe volume profile in step 414 to conduct the conversation at step 418.

[0035] In one embodiment, the safe volume profile 414 is designed to meet CSA and UL requirements for acoustic safety. The safe volume profile 414 is an acoustically safe, lower volume profile that allows users to safely listen to the

incoming call in handsfree mode without damaging the user's hearing, even if the mobile device is next to the user's ear. The safe volume profile 414 may be customized by the user to allow the user to change the volume level to a higher or lower preset volume after the first few seconds of conversation at the preset level. For example, if the user is in a noisy environment, then the user may increase the volume level.

[0036] During the phone conversation 418, if the user decides to switch modes, as shown in step 420, then another operating mode may be selected in step 404. The device software monitors for a mode change, and switches to operate in the volume profile associated with the newly-selected operational mode. For example, a user may initially answer a call using handset mode 410 and place the device to his ear during the phone conversation 418. The device is initially set to the handset volume profile 416. In the middle of the conversation, the user decides to switch modes to a handsfree mode 408. The user selects the handsfree mode 408, and the device switches to a safe volume profile 414. Thus, if the user has not moved the mobile device from his or her ear, the user's hearing will not be damaged. The user may thereafter adjust the volume of the mobile device to conduct a conversation in handsfree mode.

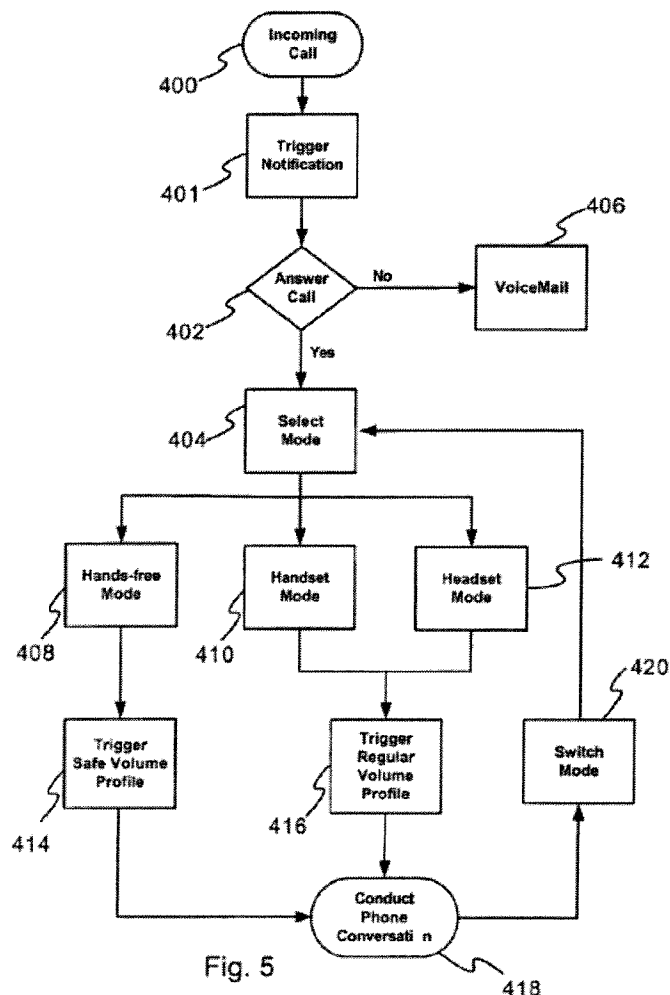
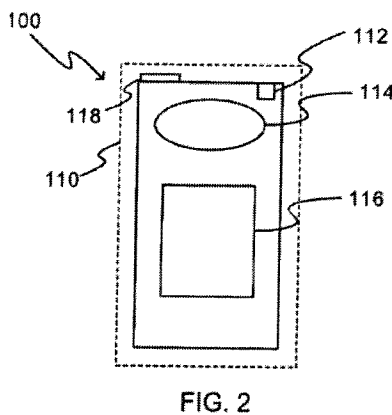
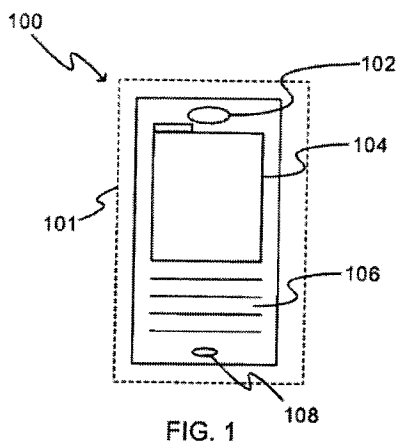


Fig. 5

**A. Independent Claim 1**

Claim 1 is directed to a method of processing a voice call at a mobile device having a first speaker and a second speaker. The first speaker is for use in a handset mode of operation in which the mobile device is placed in close proximity to a user's ear, and the second speaker is for use in a hands free mode of operation. The second speaker is capable of generating a larger acoustic output signal than the first speaker. Such a mobile device is described in detail at paragraphs [0020]-[0025] describing FIGS. 1 and 2.



The receiver 102 may be a transducer that modulates an electrical sound signal to a voice audio signal. The receiver 102 has a limited volume setting and is generally not suitable for handsfree operation, as it is designed to be placed in close proximity to the user's ear. The speakerphone

device 114 includes its own loudspeaker and microphone circuitry and is designed for both voice input through the microphone and broadcasting of voice output through the loudspeaker. The speakerphone device 114 generates a larger acoustic output signal than the receiver 102 so that the user can hear the incoming call even when the device 100 is placed away from the user's ear.

The method includes storing a safe volume profile at the mobile device associated with the handsfree mode of operation. The safe volume profile provides a default volume setting for the second speaker which is selected to reduce the risk of damage to a user's hearing if the mobile device is operated in close proximity to the user's ear while in the hands free mode of operation. The handsfree mode of operation is a mode for listening to the voice call while holding the mobile device away from the user's ear. This step is described, for example, at paragraph [0018], which states that in one embodiment, upon selection of a handsfree mode of operation, the mobile device switches to a safe volume profile so that the call is conducted with a lower volume setting. In another embodiment, this lower volume setting is selected such that the volume is within a safe volume level even if the mobile device is pressed against the user's ear. The safe volume profile in handsfree mode enables the user to carry on a conversation without causing hearing damage. An example safe volume profile is described at paragraph [0035], where the safe volume profile 414 is designed to meet CSA and UL requirements for acoustic safety. The safe volume profile 414 is an acoustically safe, lower volume profile that allows users to safely listen to the incoming call in handsfree mode without damaging the user's hearing, even if the mobile device is next to the user's ear.

The method further recites answering an incoming call with the mobile device in the handset mode of operation according to a regular volume profile that is higher than the default volume setting of the safe volume profile. This step is described in paragraph [0034] and shown in FIG. 5 at 412, 416. If the user chooses to answer the call using either a handset mode 410 or

headset mode 412, then a handset volume profile is triggered at step 416 in which the device utilizes the default handset volume level to conduct the phone conversation at 418.

The method also recites switching the mobile device from the handset mode of operation to the handsfree mode of operation while processing the incoming call. An example of this step is shown in FIG. 5 at 420 and described in paragraph [0036]. During the phone conversation 418, if the user decides to switch modes, as shown in step 420, then another operating mode (*e.g.*, handsfree mode 408) may be selected in step 404.

The method further recites operating the mobile device in the handsfree mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation. An example of this step is shown in FIG. 5 of the present application at 414 and described in paragraph [0036]. There, in the middle of the conversation, the user decides to switch modes to a handsfree mode 408. The user selects the handsfree mode 408, and the device switches to a safe volume profile 414. Thus, if the user has not moved the mobile device from his or her ear, the user's hearing will not be damaged.

#### **B. Independent Claim 33**

Claim 33 is directed to a mobile device having a first speaker and a second speaker. The first speaker is for use in a handset mode of operation in which the mobile device is placed in close proximity to a user's ear, and the second speaker is for use in a handsfree mode of operation in which the mobile device is held away from the user's ear. The second speaker is capable of generating a larger acoustic output signal than the first speaker. Such a mobile device is described in detail at paragraphs [0020]-[0025] describing FIGS. 1 and 2. The receiver 102

may be a transducer that modulates an electrical sound signal to a voice audio signal. The receiver 102 has a limited volume setting and is generally not suitable for handsfree operation, as it is designed to be placed in close proximity to the user's ear. The speakerphone device 114 includes its own loudspeaker and microphone circuitry and is designed for both voice input through the microphone and broadcasting of voice output through the loudspeaker. The speakerphone device 114 generates a larger acoustic output signal than the receiver 102 so that the user can hear the incoming call even when the device 100 is placed away from the user's ear.

Claim 33 recites a memory for storing a safe volume profile associated with the handsfree mode of operation. The safe volume profile provides a default volume setting selected to reduce the risk of damage to a user's hearing if the second speaker is operated in close proximity to the user's ear while in the handsfree mode of operation. This memory is described, for example, at paragraph [0028]. The safe volume profile is further described at paragraph [0018], which states that in one embodiment, upon selection of a handsfree mode of operation, the mobile device switches to a safe volume profile so that the call is conducted with a lower volume setting. In another embodiment, this lower volume setting is selected such that the volume is within a safe volume level even if the mobile device is pressed against the user's ear. The safe volume profile in handsfree mode enables the user to carry on a conversation without causing hearing damage. An example safe volume profile is described at paragraph [0035], where the safe volume profile 414 is designed to meet CSA and UL requirements for acoustic safety. The safe volume profile 414 is an acoustically safe, lower volume profile that allows users to safely listen to the incoming call in handsfree mode without damaging the user's hearing, even if the mobile device is next to the user's ear.

The mobile device further includes a transceiver for receiving and answering a mobile call. The transceiver is shown in FIG. 3 and described at paragraphs [0026]-[0031].



The mobile device further includes a mode control system for selecting the handset mode of operation to process the incoming call. The handset mode of operation has an associated regular volume profile that is higher than the default volume setting of the safe volume profile. The mode control system further includes means for switching the mobile device from the handset mode of operation to the handsfree mode of operation while processing the incoming call and means for operating the mobile device in the hands free mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation. An example mode control system is described at paragraph [0030], which states:

[0030] These device subsystems include a mode control system 318, a volume control system 320, a profile selector 322 and a notification trigger 324. These systems may be realized by software instructions, or by a combination of software instructions and associated hardware. The mode control system 318 controls the different operational modes on the device, including handset, headset and handsfree modes. Handset mode is used when answering the device by placing the receiver in proximity to the user's ear and speaking through the microphone. Headset mode is used when attaching an external headset or earpiece to the headset jack of the device for voice communication. Handsfree mode is used when using the speakerphone subsystem 314 on the device 300.

### **C. Independent Claim 41**

Claim 41 is directed to a method of processing a voice call by a mobile device that is configured to operate in handset mode in which the mobile device is placed against a user's ear and in handsfree mode in which the mobile device is held away from the user's ear. Such a mobile device is described in detail at paragraphs [0020]-[0025] describing FIGS. 1 and 2. The receiver 102 may be a transducer that modulates an electrical sound signal to a voice audio signal. The receiver 102 has a limited volume setting and is generally not suitable for handsfree operation, as it is designed to be placed in close proximity to the user's ear. The speakerphone

device 114 includes its own loudspeaker and microphone circuitry and is designed for both voice input through the microphone and broadcasting of voice output through the loudspeaker. The speakerphone device 114 generates a larger acoustic output signal than the receiver 102 so that the user can hear the incoming call even when the device 100 is placed away from the user's ear.

The method includes initially limiting the volume to a preset initial level when the mobile device is manually switched from the handset mode to the handsfree mode so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode to the handsfree mode. Such a step is illustrated in FIG. 5 at 404, 408, 414 and described at paragraph [0036]. In the example, a user initially answers a call using handset mode 410 and places the device to his ear during the phone conversation 418. The device is initially set to the handset volume profile 416. In the middle of the conversation, the user decides to switch modes to a handsfree mode. The user selects the handsfree mode 408, and the device switches to a safe volume profile 414. Thus, if the user has not moved the mobile device from his or her ear, the user's hearing will not be damaged.

The method further recites enabling the user to raise the volume, while remaining in handsfree mode and after the volume has been initiated at the preset initial level, to a higher level than the preset initial level. This step is described, for example, at paragraph [0036]. There, the user selects the handsfree mode 408, and the device switches to a safe volume profile 414. Thus, if the user has not moved the mobile device from his or her ear, then the user's hearing will not be damaged. The user may thereafter adjust the volume of the mobile device to conduct a conversation in handsfree mode.

## **VI. Grounds of Rejection to Be Reviewed On Appeal**

Independent claims 25 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,522,894, application of Schmidt (Schmidt), in view of U.S. Patent Publication No. 2003/0002688, application of Kanevsky (Kanevsky), in further view of U.S. Patent Publication No. 2004/0185919, application of Yoo (Yoo). Independent claim 41 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmidt, in view of Kanevsky, in further view of U.S. Patent No. 5,862,236, application of Haas (Haas). These rejections are appealed. Dependent claims 26, 29-32, 34, 37-40, 42, 43, 45, and 46 stand or fall with the independent claims.

## **VII. Argument**

### **A. The claim rejections failed to follow established legal principles.**

The burden of proof is on the Examiner to demonstrate obviousness. E.g., In re Oetiker, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). The Examiner's burden includes (but is not limited to) citing references that teach or suggest all of the features of a claimed invention. E.g., In re Ochiai, 71 F.3d 1565, 1572 (Fed. Cir. 1995).

Further, any conclusion of obviousness must be supported by evidence and articulated reasoning. KSR Int'l Co. v. Teleflex Inc., 550 U. S. 398, 127 S. Ct. 1727, 1741 (2007) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)); see also In re Lee, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002). Although the Examiner is not obligated to apply a teaching-suggestion-motivation analysis, when the Examiner chooses to

base a rejection upon such an analysis (as the Examiner did here), the Examiner must follow the rules applicable to such an analysis.

These legal principles are well established and their validity is not in dispute on this appeal. The Applicant contends that the rejections are invalid because the Examiner failed to follow them. The Examiner has erroneously rejected claims by: (1) failing to demonstrate, in sever respects, that all features of the claimed invention are shown by the evidence (in other words, even if one skilled in the art had ample reason to pick and choose elements from the cited references, the claimed invention would not result); and (2) failing to provide a valid reason, supported by evidence, why one skilled in the art would combine elements from the cited references. These grounds for appeal will now be discussed in more detail.

**B. The Office fails to cite to any reference as disclosing operating the mobile device in the handsfree mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation as recited by claim 25.**

Claim 25 recites that the mobile device operates in the handsfree mode of operation according to the safe volume profile. Claim 25 states that the safe volume profile protects the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation.

The Office fails to cite to any references containing a teaching or suggestion of such a feature. In fact, on page 5 of the Final Office Action of October 27, 2010, the Office admits that the combination of Schmidt and Kanevsky fails to disclose the safe volume profile being associated with the hands-free mode. The Office makes no allegation that such a teaching or suggestion can be found in Yoo. Because it is the Examiner's burden to produce evidence that

teach or suggest all of the features of a claimed invention, the Examiner's failure to do so is fatal to the rejection.

The lack of such a teaching in the proposed combination of references is, in a way, unsurprising. None of the cited references contemplate the safety situation described in the instant application and explicitly recited in the claims. Namely, the hearing of the mobile device user can be damaged if the handsfree mode of operation is initiated when the mobile device is in close proximity to the user's ear. None of the cited references consider operation of the device in this abnormal configuration where injury may occur.

For example, the Schmidt reference describes a wireless communication device that can operate in a regular "phone mode" or in a "radio mode." In radio mode, the phone handles communications in a half-duplex manner such that voice data is only transmitted when the user pushes a button (*i.e.*, push-to-talk mode). The Schmidt reference explains that the default setting is for the audio output to be through a loud speaker in radio mode and through a quieter speaker in phone mode. The Schmidt reference only contemplates operation in a normal configuration, where the audio output is through the loud speaker when the device is in radio mode and held away from the user's ear, and where the audio output is through the quieter speaker in phone mode when the device is held by the user's ear.

The Yoo reference also fails to consider the abnormal operating condition addressed by the instant application. Yoo merely discloses a detachable microphone/speaker combination for a phone (Yoo, FIGS. 1A-C). The detachable unit is always next to a user's ear, even when detached from the phone unit. *Id.* Therefore, Yoo never contemplates any change in volume, let alone a "safe volume" setting, because the phone and speaker are always being used in the same mode and at the same volume. Thus, all operations in Yoo are in a normal configuration.

Further, Kanevsky relates to preset volume limits for headphones. The headphones in Kanevsky are utilized as intended (*i.e.*, always in direct contact with the user's ear). Thus, Kanevsky fails to disclose anything similar to maintaining a "safe volume" setting when switching modes of operation from a handset mode to a handsfree mode to address the abnormal operating configuration of the instant application.

Despite the fact that none of the cited references contemplate the abnormal operating configuration described in the present application and recited in claim 25, on page 5 of the Final Office Action of October 27, 2010, the Examiner alleges that it is nonetheless obvious to operate the mobile device in the handsfree mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation. Page 5 states:

However, the combined teaching of Schmidt and Kanevsky et al. as a whole, failed to disclose of the safe volume profile as being associated with the hands-free mode.

But, it would have been obvious for one of the ordinary skills in the art to have substituted the safe volume profile being associated for many different mode of operations as noted in Kanevsky et al. for a specific wherein such safe volume profile as being associated with the hands-free mode if desired which yield unexpected result so as to merely protect the listener's hearing while listening to the audio sound according to such hands-free mode.

This finding by the Office is clearly erroneous. The Office expressly admits that none of the references cited discloses the claimed feature. Further, the feature is not obvious because the feature is incorporated to address an abnormal use configuration not recognized in the cited references. Put another way, rather than suggesting the claimed element, the references are more

likely to suggest the opposite of what is recited in claim 25: increase the volume level when switching between a handset mode and a handsfree mode. Under a normal operating condition, a mobile device being switched to a handsfree mode would be expected to begin broadcasting at a loud volume to enable a user to still hear a conversation despite holding the mobile device further from his ear than in a handset mode.

In stark contrast, claim 25 recites operating the mobile device according to a safe volume profile to protect the hearing of the mobile device user during a transition from handset mode to handsfree mode. Thus, the invention described in claim 25 addresses the abnormal operating condition of a user initiating handsfree mode while still holding the mobile device next to his ear. The method of claim 25 does the exact opposite action one would expect should be done when switching from a handset mode to a handsfree mode. Namely, the mobile device opts not to change immediately to a loud mode for the user to hear a conversation at a distance, but instead operates in a safe volume profile so as to protect the hearing of the mobile device user. The, user may then, in some configurations, further adjust the volume (*e.g.*, increase the volume as described in claim 26).

Because the method of claim 25 operates in an opposite manner as one would expect when transitioning from a handset mode to a handsfree mode, and the method of claim 25 initiates the safe volume profile during such a transition to address an abnormal operating configuration that is not contemplated by any of the cited references, it is respectfully submitted that the Office's conclusion that the present feature of claim 25 is obvious is clearly unsupported and in error. While protecting against hearing damage is, in general, a noble goal that should be pursued, the specifics, recited in claim 25, of using a safe volume profile to protect hearing of mobile device users in an abnormal operating condition that is not contemplated by the cited references is clearly not obvious. Because the Office admits that such a feature is not taught or

suggested in the cited references and fails to recite supported reasoning as to why that feature is obvious in light of the cited references, it is respectfully submitted that the § 103(a) rejection of claim 25 must be overturned.

**C. The 35 U.S.C. § 103(a) rejections of claims 33 and 41 and the dependent claims must be overturned for similar reasons as those provided for claim 25.**

Independent claims 33 and 41 recite similar features as claim 1. Independent claim 33 recites:

the mode control system further comprising means for switching the mobile device from the handset mode of operation to the handsfree mode of operation while processing the incoming call and means for operating the mobile device in the hands free mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation.

Claim 41 recites:

initially limiting the volume to a preset initial level when the mobile device is manually switched from the handset mode to the handsfree mode so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode to the handsfree mode.

The rejection of claim 41 further incorporates the Haas reference. However, the Office makes no allegation as to Haas disclosing the feature at issue. Haas is cited merely for teaching enabling the user to raise the volume, while remaining in a certain mode of operation and after the volume has been initiated at the preset initial level, to a higher than the preset initial level on page 18 of the Final Office Action of October 27, 2010.

Because the cited references fail to disclose these features, it is respectfully submitted that claims 33 and 41 are allowable. Dependent claims in the instant application are also allowable for at least the same reasons as the independent claims.



**D. The Final Office Action fails to provide a reason why one skilled in the art would combine the cited references.**

Recent court decisions may have given Examiners more latitude in handling obviousness rejections. But not one court decision allows an Examiner to provide no evidentiary support when proffering a reason to combine disparate references. (Legal authority actually goes the other way. E.g., In re Lee, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (the agency must not only reach a sound decision, the agency must also develop an evidentiary basis for its findings and articulate reasons for its decision). And not one court decision provides that circular reasoning is an allowable basis for combining references, such that one skilled in the art would have a reason to combine the elements merely to obtain the combination. (Again, legal authority goes the other way, saying that saying that merely because elements could be combined, does not mean there was an impetus to combine them. E.g., In re Fulton, 73 USPQ2d 1141, 1145 (Fed. Cir. 2004) (the evidence must suggest the desirability of the combination, not merely the feasibility). Accordingly, the rejections of independent claims 25 and 33 are in clear error and must be withdrawn.

Independent claim 25 recites a “safe volume profile providing a default volume setting...selected to reduce the risk of damage to a user’s hearing if the mobile device is operated in close proximity to the user’s ear while in the handsfree mode of operation.” Independent claim 33 contains a similar limitation. The Office Action admits that none of the cited references contain this limitation of claims 25 and 33 (which, for reasons argued above, demonstrates error in the rejection). The Office Action is further erroneous, however, for concluding that there is reason that any elements from the references should be combined at all. The Office Action concludes that it would have been obvious to combine elements from the cited references “which

yield unexpected [*sic*] result so as to merely protect the listener's hearing while listening to the audio sound according to such hands-free mode.” (Office Action, pages 5 and 10).

The Office Action's conclusory assertion that one of ordinary skill in the art would combine the cited references merely to achieve the benefit of the combination is unsupported by any evidence in the record and is clear error. An obviousness rejection “cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007); see also MPEP § 2142. The Office Action has not only failed to cite references that disclose each limitation of claims 25 or 33, the Office Action has also further failed to provide any rational reason—supported by evidence—why one of skill in the art would combine elements from the cited references. The circular reasoning that one of skill in the art would combine references for the sole reason of achieving the intended benefit of combining them cannot sustain an obviousness rejection. The rejection, therefore, is in clear error and must be withdrawn.

A person skilled in the art would, therefore, have no reason to modify the Schmidt reference based on the teachings of Kanevsky, Yoo, or any other reference, to provide a safe volume profile, as recited in independent claims 25 and 33. Furthermore, even if one skilled in the art were to attempt such a combination, it would not result in the method or mobile device of claims 25 and 33. For at least these reasons, Applicants respectfully submit that the claim rejections are in clear error and must be withdrawn.

## **VIII. Claims Appendix**

A claims appendix containing a copy of the claims subject to this appeal is attached.

**IX. Evidence Appendix**


No evidence is being submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, nor is there any other evidence entered by the Examiner or relied upon by the Applicant. An evidence appendix indicating "None" is attached.

**X. Related Proceedings Appendix**

There are no related proceedings. A related proceedings appendix indicating "None" is attached.

Respectfully submitted,

April 29, 2011

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## CLAIMS APPENDIX

1-24 (Cancelled)

25. A method of processing a voice call at a mobile device having a first speaker and a second speaker, the first speaker for use in a handset mode of operation in which the mobile device is placed in close proximity to a user's ear and the second speaker for use in a handsfree mode of operation, the second speaker capable of generating a larger acoustic output signal than the first speaker, comprising:

storing a safe volume profile at the mobile device associated with the handsfree mode of operation, the safe volume profile providing a default volume setting for the second speaker which is selected to reduce the risk of damage to a user's hearing if the mobile device is operated in close proximity to the user's ear while in the handsfree mode of operation, wherein the handsfree mode of operation is a mode for listening to the voice call while holding the mobile device away from the user's ear;

answering an incoming call with the mobile device in the handset mode of operation according to a regular volume profile that is higher than the default volume setting of the safe volume profile;

switching the mobile device from the handset mode of operation to the handsfree mode of operation while processing the incoming call; and

operating the mobile device in the handsfree mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation.

26. The method of claim 25, further comprising disabling adjustment of the volume level from the default volume setting of the safe volume profile for a predetermined time period after the user has switched the mobile device from the handset mode of operation to the handsfree mode of operation.

27-28. (Cancelled)

29. The method of claim 25, further comprising:

defining a maximum safe volume in the safe volume profile; and

preventing adjustment of the volume level from the default volume setting to a volume level that exceeds the maximum safe volume when in the handsfree mode of operation.

30. The method of claim 25, further comprising:

switching the mobile device from the handsfree mode of operation back to the handset mode of operation while processing the incoming call; and

operating the mobile device in the handset mode of operation according to the regular volume profile.

31. The method of claim 25, further comprising:

prior to answering the incoming call with the mobile device, enabling a notification on the mobile device indicating the receiving of the incoming call.

32. The method of claim 31, further comprising:

determining whether to answer the incoming call in response to the notification; and  
if the incoming call is not to be answered, then redirecting the voice call to a voicemail system associated with the mobile device.

33. A mobile device having a first speaker and a second speaker, the first speaker for use in a handset mode of operation in which the mobile device is placed in close proximity to a user's ear and the second speaker for use in a handsfree mode of operation in which the mobile device is held away from the user's ear, the second speaker capable of generating a larger acoustic output signal than the first speaker, comprising:

a memory for storing a safe volume profile associated with the handsfree mode of operation, the safe volume profile providing a default volume setting selected to reduce the risk of damage to a user's hearing if the second speaker is operated in close proximity to the user's ear while in the handsfree mode of operation;

a transceiver for receiving and answering an incoming call;

a mode control system for selecting the handset mode of operation to process the incoming call, the handset mode of operation having an associated regular volume profile that is higher than the default volume setting of the safe volume profile;

the mode control system further comprising means for switching the mobile device from the handset mode of operation to the handsfree mode of operation while processing the incoming call and means for operating the mobile device in the handsfree mode of operation according to the safe volume profile so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode of operation to the handsfree mode of operation.

34. The mobile device of claim 33, further comprising a volume control system for disabling adjustment of the volume level from the default volume setting of the safe volume profile for a predetermined time period after the user has switched the mobile device from the handset mode of operation to the handsfree mode of operation.

35-36. (Cancelled)

37. The mobile device of claim 33, further comprising:

a volume control system for defining a maximum safe volume in the safe volume profile and for preventing adjustment of the volume level from the default volume setting to a volume level that exceeds the maximum safe volume when in the handsfree mode of operation.

38. The mobile device of claim 33, wherein the mode control system further comprises:

means for switching the mobile device from the handsfree mode of operation back to the handset mode of operation while processing the incoming call; and

means for operating the mobile device in the handset mode of operation according to the regular volume profile.

39. The mobile device of claim 33, further comprising:

a notification trigger system on the mobile device for notifying the user of a received voice call prior to answering the voice call.

40. The mobile device of claim 39, further comprising:

means for determining whether to answer the incoming call in response to the notification;

and

means, responsive to the determining means, for redirecting the voice call to a voicemail system associated with the mobile device.

41. A method of processing a voice call by a mobile device that is configured to operate in handset mode in which the mobile device is placed against a user's ear and in handsfree mode in which the mobile device is held away from the user's ear, the method comprising:

initially limiting the volume to a preset initial level when the mobile device is manually switched from the handset mode to the handsfree mode so as to protect the hearing of the mobile device user in case the mobile device is still held in close proximity to the user's ear when the mobile device transitions from the handset mode to the handsfree mode; and

enabling the user to raise the volume, while remaining in handsfree mode and after the volume has been initiated at the preset initial level, to a level higher than the preset initial level.

42. The method of claim 41 wherein the enabling step includes:

enabling the user to raise the volume, while remaining in handsfree mode and only after the volume has remained at the preset initial level for a finite time period, to a level higher than the preset initial level.

43. The method of claim 42 wherein the finite length of time is about a few seconds.



44. (Cancelled)

45. The method of claim 41 further comprising:

emitting the voice call from a first speaker when in handset mode and emitting the sound from a second speaker when in handsfree mode.

46. The method of claim 41 wherein the initially limiting step includes:

initially limiting the volume, when the mobile device is switched from handset mode to handsfree mode in the middle of a conversation.

EVIDENCE APPENDIX

**NONE**

(No evidence is being submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, nor is there any other evidence entered by the Examiner or relied upon by the Applicant)

RELATED PROCEEDINGS APPENDIX

**NONE**

(There are no related proceedings)